

# **Short-Term Electoral Forces in Western Europe: Changing Weight of the Economic Vote?**

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## **Abstract**

The question of weakening social cleavages and partisan ties within Western European electorates has received considerable attention. The dominant conclusion maintains that these long-term bonds have weakened, thus making for a ‘dealigned’ voter more responsive to short-term forces, coming from candidates or issues. However, the notion that such short-term forces are now more active has been little tested. In this paper, we focus on a short-term electoral force of abiding interest – the economic vote. We combine analyses of extended national election survey time series data for a half-dozen leading West European democracies with a macro-analysis of incumbents’ vote shares in Western Europe. These data allow estimating theoretically compelling voting behavior models to examine the evolution of the economic vote. In line with previous research, we hypothesize that the electoral weight of the economic vote has increased over time, enabling voters to hold their governments ever more accountable. Our results, however, offer no indications of a growth of economic voting over time.

## 1. INTRODUCTION

Over the last couple of decades, voting behavior in advanced democracies appears to have changed strongly. The main causal mechanism referred to for explaining this alleged pattern of change is a process called ‘dealignment’, implying that over time the bonds between parties and voters are weakening (Crewe, Sarlvik, & Alt, 1977; Dalton & Wattenberg, 2002). These changes serve as a challenge for fundamental theories of voting behavior. As a response, a number of leading scholars have concluded that a shift is taking place in which long-term vote choice determinants are becoming less important, while short-term determinants are increasingly important (Costa Lobo, 2006; Thomassen, 2005; Walczak, van der Brug, & de Vries, 2012).

In the context of Western Europe, this process of change shows itself in the decaying impact of social characteristics and cleavages on vote choices (Franklin, Mackie, & Valen, 2009; Walczak et al., 2012). The impact of these changes is evident from the declining electoral strength of traditional cleavage parties across Western Europe (Best, 2011). Furthermore, a growing number of empirical studies offer indications that social cleavages are becoming less important predictors of citizens’ vote choices (Best, 2011; Evans & Tilley, 2012; Oddbjørn Knutsen, 2009; Nieuwbeerta, de Graaf, & Ultee, 2000; Nieuwbeerta & Ultee, 1999). In contrast to this wide scholarly attention for the decline of long-term factors, the related claim of a shift towards the short term has been little studied.

A number of different short-term factors can be thought of as becoming increasingly important determinants of the vote choices of dealigned electorates (Costa Lobo, 2006; Walczak et al., 2012). In this paper, we focus on whether and how the effect of one major indicator varies temporally: the economy. To this end, we examine over-time changes in voting for the incumbent by means of micro- as well as macro-perspectives. In a first step, we present individual-level analyses of a collection of national election survey data from a half-dozen countries across Western Europe. We analyze voting in Denmark (1987-2011), Germany (1976-2013), Great-Britain (1974-2010), the Netherlands (1986-2012), Norway (1985-2009) and Sweden (1985-2006). These nations are selected because of the quality and quantity of their election data, which make for stronger testing. As a result, our individual-level analyses provide insights regarding changes in the economic vote from the 1970s to the

present. These analyses are supplemented with a rigorous analysis of a large time-series-cross-sectional dataset of incumbent vote shares in Western European countries since 1950.

In what follows, we first give an overview of the literature on changing voting behavior over time. In this section, we have special attention for expectations with regard to the impact of economic considerations on voting behavior. Next comes a presentation of the data and the methods used, which is followed by an overview of the results. In the results section, we first focus on the micro-level before moving to an aggregate-level analysis. We end with some concluding thoughts on the results and their implications.

## **2. LITERATURE REVIEW**

### *2.1. Towards the short-term?*

The work of Lipset and Rokkan (1967) has been highly influential for our understanding of what determines voting behavior in Western Europe. The validity of their assertion that cleavage structures dominate voting behavior was evident from the ‘frozenness’ of European party systems (Lipset & Rokkan, 1967). While prominent, Lipset and Rokkan’s theory was soon contested. On the one hand, an increase of instability in voting behavior, coupled with rising levels of volatility, has challenged the contention of stability inherent in the work of Lipset and Rokkan (Crewe & Denver, 1985; Crewe et al., 1977; Dalton & Wattenberg, 2002). On the other hand, there has been a fierce discussion on whether class cleavages are becoming less important predictors of electoral behavior. Clark and Lipset’s (1991) contention that social class was ‘dying’ as a determinant of electoral behavior has sparked a debate about the presence and nature of this erosion (Evans & Tilley, 2012; Franklin et al., 2009; Jansen, de Graaf, & Need, 2011; Nieuwbeerta et al., 2000) or the continued relevance of classes in the vote choice process (Brooks, Nieuwbeerta, & Manza, 2006; van der Waal, Achterberg, & Houtman, 2007). A similar discussion is ongoing with respect to the alleged decline of religion on voting behavior in Western Europe (Botterman & Hooghe, 2012; Oddbjørn Knutsen, 2004; van der Brug, Hobolt, & de Vreese, 2009).

The discussion on the extent to which the impact of cleavages and socio-structural determinants on voting behavior has waned continues, in largely a methodological vein (Jansen, Evans, & de Graaf, 2013; van der Waal et al., 2007). Overall, however, the

consensus now seems to be that – especially since the 1990s – the impact of cleavages on voting is indeed eroding (Evans & Tilley, 2012). In addition, partisanship has decreased over time (Dalton & Wattenberg, 2002; Dalton, 2012) and the impact of ideology on electoral behavior as well is argued to be eroding (van der Brug, 2010; Walczak et al., 2012). In sum, a large and growing body of research indicates that the impact of structural factors and ideology on vote choices is waning. These observations lead to the question what has replaced for their impact on vote choices? A number of scholars have suggested that short-term factors should be looked at. As a consequence, short-term determinants such as issue positions, leaders, performance evaluations and the economy in general are all thought to become increasingly important vote choice determinants (Costa Lobo, 2006; Thomassen, 2005; Walczak et al., 2012).

While the supposed decline of structural factors on the vote choice has captured considerable research attention, the alleged increase of short-term factors has not. The answer to the question – what fills the gap that structural determinants have left? – however, is interesting on theoretical and normative grounds. If sociological predispositions no longer determine vote choices, that could lead to stronger mechanisms of accountability. Dealigned voters could independently assess how incumbents and parties have been performing and vote according to this judgment. If this were true, the process of dealignment could be *“producing a deliberative public that more closely approximates the classic democratic ideal”* (Dalton, McAllister, & Wattenberg, 2002: 60).

## 2.2. *Economic voting*

Research on the impact of economic conditions on voting behavior is large and still expanding (see for example the literature review in Lewis-Beck and Stegmaier (2007), or the current economic voting bibliography assembled by Stegmaier and Lewis-Beck (2013)). The classic assumption within this tradition – that can be traced back to the work of Key (1966) – is that voters hold incumbents accountable for past performances and punish or reward them accordingly. In the field of economic voting, the expectation is that incumbents are rewarded when the economy is doing well, but are punished by the voters when the economy is deteriorating. This economic voting paradigm was originally formulated within the context of the United States, but as studies on economic voting accumulated, it has become clear that the

mechanism is of importance in a wide set of electoral contexts (Lewis-Beck & Stegmaier, 2000, 2013). Moving beyond single-country studies furthermore, a number of recent publications on pooled data show that patterns of economic voting are indeed robust and consistently found across countries. This holds for the macro-level (Dassonneville & Lewis-Beck, 2014a) as well as for the micro-level (Duch & Stevenson, 2006; Nadeau, Lewis-Beck, & Belanger, 2013). As a result, by now we can safely state that the economic voter exists. Economic voting has been shown to be an important vote choice determinant in a large number of countries, and this observation holds both for elections decades ago as well as for recent elections (see for example the different collections by Bellucci, Costa Lobo and Lewis-Beck (2012), Dassonneville and Lewis-Beck (2014b) and Escobar-Lemmon and Whitten (2011)).

The evidence for the presence of an economic vote thus appears robust, but we still do not know whether the importance of the economy has grown stronger over time. An argument could indeed be made for the economic vote to increase as dealignment proceeds. After all, the term itself implies that the voter is now ‘freed’ from the distractions, or distortions, of social cleavages. Further, dealignment may be driven by a process of cognitive mobilization (Dalton, 1984, 2007). An increase of citizens’ level of education has armed voters to make their vote choices independently. Additionally, a media revolution has multiplied the number of sources that voters can rely on to obtain information on parties and politicians, their performance and their programs. Dealignment, consequently, can be considered a breeding ground for accountability to become important and for the economic vote to grow stronger over time.

Previous research gives suggestive evidence for such a pattern. Kayser and Wlezien (2011), for example, convincingly show that the economic vote is stronger in countries with low partisan attachment than what holds in contexts with strong attachments. Furthermore, they offer an indication of the individual-level mechanism explaining this finding, as they show apartisans to be more responsive to the economic context. In a similar vein, Kosmidis and Xezonakis (2010) have shown that economic evaluations weigh more heavily on the vote choices of late deciders compared to what holds for voters who decided what party to vote for before the start of the election campaign. Cross-sectional analyses thus indicate that the economic vote is stronger among the dealigned. The presence of a process of dealignment should therefore be associated with an increased weight of economic evaluations. This leads

Kayser and Wlezien (2011: 365) to assert that the implication of their findings is “*a growing effect for the objective economy on the vote in Europe*”.

Even though it seems intuitive, the fact that partisanship is linked to the strength of the economic vote does not necessarily imply that the economic vote in Europe is indeed growing stronger over time. That first of all depends on the extent to which European electorates are becoming more dealigned. Additionally, dealignment is not the only process of change observed in Western Europe and other developments could act to counterbalance the impact of dealignment, such as for example the trend of economic globalization (Duch & Stevenson, 2010; Fernández-Albertos, 2006; Hellwig & Samuels, 2007; Hellwig, 2001). Given these considerations, we argue that for any conclusions on the temporal dimension of the economic vote to be drawn, an analysis of actual over-time changes in the economic vote is warranted. Such studies are rare and the results of the limited number of studies investigating changes of the economic vote furthermore are not pointing in the same direction. Anderson (1995) claims that voters have become more sensitive to the economy when voting, but Listhaug’s (2005) analysis of retrospective voting in Europe since the 1970s does not offer indications for the claim that economic voting is on the rise in Western Europe. Furthermore, from their analyses of a wealth of survey data in advanced democracies between 1980 and 2000, Duch and Stevenson (2006, 2008) conclude that the magnitude of the economic vote is declining over time. Previous research, hence, is still inconclusive on whether and how the economic vote is changing over time. In the current paper, we aim to address this gap in the literature. To this end we investigate the temporal dimension of the economic vote in Western Europe. We examine this time dimension at a micro- as well as a macro-level, starting at the individual level, as this is where the alleged increase of the economic vote originates.

### **3. DATA AND MEASURES**

#### *3.1. Micro data*

For investigating the over-time trend in the economic vote at the individual level, we make use of data from representative election surveys in European countries that have extended time series. In contrast to previous research investigating the economic vote over a long time period (see for example Duch and Stevenson (2006) or Kayser and Wlezien (2011)), we only include election surveys in our dataset. Excluding other representative surveys, such as for

example Eurobarometer data, implies a reduction of the sample size. To obtain an accurate estimate of the economic vote, however, we are convinced that it is essential to rely on the reported vote in actual elections and not on measures of vote intention. Election studies are the ‘gold standard’ in the field of electoral research, they offer the best measures possible and hence the strongest test for our theories. Furthermore, we exclude surveys organized in the context of European Parliament elections. Even though such surveys have previously been analyzed to gain insights on the economic vote (Nadeau et al., 2013; van der Brug, van der Eijk, & Franklin, 2007), we focus on national elections only in the current paper, shedding light on the national economic vote.

Given these restrictions, the starting base for our analyses are the data from The European Voter Project (ICORE, 2005). This dataset contains continuity files of election studies in Denmark, Germany, Great Britain, the Netherlands, Norway and Sweden, with a time frame from the late 1950s until the late 1990s. Economic measures, however, are only available from the mid-1970s onwards. As the British and Danish election surveys included in this dataset did not include our preferred measures of economic evaluations, national survey data for these countries come from the UK National Archive and the Centre for Survey and Survey/Register Data.<sup>1</sup> These data were subsequently complemented with survey data covering the most recent elections in each of the countries (for an overview of the data sources for all election surveys included in our analyses, see Appendix 1). Combining all these data sources, we can gain insights in the evaluation of the economic vote, at an individual level, from the mid 1970s until present.

Analyzing the economic vote at an individual level in this set of six European democracies, we are examining vote choices in multiparty and proportional electoral systems. Such systems are different from the two-party systems where the tradition of economic voting originated. The nominal nature of party choice variables has pressed scholars investigating the economic vote in these contexts to use multinomial logit models (van der Brug et al., 2007) or to investigate voting for each party separately (Duch & Stevenson, 2006, 2008). To test economic voting theory in its purest form, however, a dependent variable capturing whether or not a respondent voted for an incumbent party can be justified, even though it is binary in

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<sup>1</sup> The Danish National Election Study data are available for the period 1971-2011 (<http://www.valgprojektet.dk/default.asp>). We are grateful to Rune Stubager for providing additional information and datasets for the Danish case.

nature. This approach has the additional advantage of comparability with the macro-analysis of the incumbent vote share (see below). Importantly, we decided not to take into account non-voters in our analysis, which is in line with how Duch and Stevenson (2006) have proceeded for their comparative analysis of the economic vote.

As the focus of our paper is on over-time variation in the effect of economic evaluations on voting behavior, a crucial point is how economic evaluations are measured. Most importantly, in order to assess changes over time in the effect of the economy, we have to rely on indicators that are measured consistently. When combining the information of election survey data collected at different points in time and in different countries, however, some variation in question wording is inevitable. As a guiding principle therefore, we include survey data when they contain an economic evaluation measure of the preferred type. Building on a rich literature of economic voting at an individual-level, we prefer a measure of respondents' retrospective and sociotropic evaluation of the economy (see also the discussion of measures in Duch and Stevenson, 2008).<sup>2</sup> Sociotropic and retrospective items can be considered the standard measures in the economic voting literature, as they are most widely used, replicated and tested (Lewis-Beck, 1988; Stubager, Botterill, Lewis-Beck, & Nadeau, 2014). For reasons of comparability we have standardized all economic evaluation measures to run from 0 (most negative evaluation) to 1 (most positive evaluation).

Our focus is on the impact of economic evaluations on voting in European democracies, but we can self-evidently not assess that effect without controlling for a set of relevant covariates. First, we control for a number of socio-demographic variables in each of the countries included. Besides gender and age, we also control for levels of education, religion<sup>3</sup>, social class or income and urbanization. What socio-structural covariates are included in the models is dependent on the availability of measures in the surveys and varies from country to country and sometimes from election to election as well. With the exception of age and gender, all socio-demographic measures were standardized to run from 0 to 1. The inclusion of these measures allows us to take into account the impact of cleavage structures on voting behavior, which is considered of foremost importance in the context of European democracies (Lipset & Rokkan, 1967). Second, we include a partisan 'anchor variable', which is respondents' left-

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<sup>2</sup> The German data are an exception to this rule, as only a measure of the current state of the economy was included in German national election surveys.

<sup>3</sup> Depending on availability, we include religious attendance, religiosity or religious denomination.



right placement (standardized to run from 0 to 1) in all countries except the British case, where we include partisanship (whether or not respondents identify with the incumbent party).

### 3.2. *Macro data*

In a second step, we investigate the over-time evolution of the economic vote at an aggregate level. To do so, we examine the link between the objective economy and incumbents' performance in countries in Western Europe since 1950. The dataset used for these analyses cover 240 elections in 14 countries (see Appendix 2 an overview of the elections included).

The dependent variable for the analyses at the macro-level is the incumbent vote share. For constructing this measure, electoral results as documented by Mackie and Rose (1991) were used. These were supplemented with information from election reports in *Electoral Studies* and the *European Journal of Political Research* and from online sources for the most recent elections (Nordsieck, 2015). Information on the incumbency status of parties comes from the 'Parliament and Government Composition Database', which provides an overview of the cabinet composition in most OECD countries since 1945 (Döring & Manow, 2012). Incumbent vote shares were calculated by summing the vote shares of all parties that were part of the governing coalition before the elections.

To examine the economic vote over time at an aggregate level, we rely on an objective indicator of the state of the economy. To this end, we make use of GDP growth rates, which Kayser and Wlezien (2011: 379) have labeled "*the most general objective measure of economic welfare*". Furthermore, previous research has established a strong link between GDP growth rates and incumbent vote shares in Europe (Dassonneville & Lewis-Beck, 2014a). Focusing on this economic indicator comes with the additional advantage that long time series of GDP growth rates are available for most OECD countries. We make use of the data from The Conference Board (2014), allowing us to go back to 1950. As is customary in research on economic voting, we incorporate a lag structure in our GDP measure and we use the conventional one year lead time (Lewis-Beck & Stegmaier, 2013). As time series of quarterly GDP growth rates are not available for the long time period covered by our analyses, we employ annual GDP growth rates. To take into account differences in the timing

of particular elections, the data were weighted according to the election month – using the approach suggested by Bélanger and Gélinau (2010: 98).<sup>4</sup>

Furthermore, our indicator of time is operationalized as time since 1950. Additionally, we control for the incumbent vote share in the previous elections and for two aspects of clarity of responsibility in the analyses. First, we include a measure of the effective number of parties in parliament, for which we use the Laakso-Taagepera (1979) index, as calculated and published by Gallagher (2015). Second, the number of parties in government is controlled for, using information available in the ParlGov dataset (2012).

## 4. METHODS

### 4.1. The micro-level

In our individual-level analyses we examine voting for an incumbent party, which implies modeling a binary dependent variable (1 if a respondent voted for an incumbent party, 0 otherwise). We hence estimate binary logistic regression models explaining this vote choice. Our interest is in the impact of economic evaluations on the probability to vote for the incumbent, controlling for the impact of socio-demographics and ideology. The models hence take the following form, with the inclusion of each of the control variables being dependent on their availability in a particular election study:

$$\ln(\text{Vote for incumbent} \mid \text{Not vote for incumbent}) = \alpha + \beta_1 \text{economy} + \beta_2 \text{controls} + \varepsilon \quad (1)$$

With *economy* being voters' retrospective sociotropic evaluation of the state of the economy in their country.

A model of this form is estimated separately for each of the national election studies included. In order to assess the impact of the economy on the vote choice as well as its evolution over

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<sup>4</sup> We slightly modified their formula to ensure a one-year time lag for the economic indicators:  $\rho = [\rho_{(t-2)} * (12 - \sigma_{(t)})/12] + [\rho_{(t-1)} * (\sigma_{(t)}/12)]$ , where  $\rho$  is the annual economic indicator,  $\sigma$  is the election month and  $t$  is the election year. Data for GDP come from the Total Economy Database, providing comparative economic data for a wide set of countries from 1950 onwards.

time, we subsequently simulate quantities of interest, in this case the change in the probability of voting for the incumbent as respondents' evaluation of the economy changes from the most negative to the most positive evaluation. This effect of economic evaluations is calculated while holding all other covariates in a specific model at their mean value and is based on 1,000 simulated observations each time (King, Tomz, & Wittenberg, 2000).

Besides such a country-by-country analysis of the evolution of the economic vote at an individual level, in a second step we pool all election surveys in a single dataset to examine the presence of a temporal trend in the impact of economic evaluations on voting for the incumbent. Given that the control variables included in the election specific models differ from country to country and from election to election, a direct pooling approach is not possible. To overcome this issue, for each election sample two separate models are estimated with only socio-demographic variables and only measures of ideology (left-right self-placement or party id) respectively. The linear predictions, or *yhats*, of these models were subsequently saved and included in the pooled dataset. These serve as standardized measures to control for the impact of socio-demographics and ideology on the vote in our analyses. The other variables included in the pooled model are, besides the vote choice (1 = vote for an incumbent party, 0 = not vote for an incumbent party), respondents' economic evaluation – which is standardized to run from 0 to 1 – and a measure of time since 1970. To examine the impact of economic evaluations on voting for the incumbent, and whether this impact has changed over time, a binary logit model of the following form is estimated on the pooled data:

$$\ln(\text{Vote for incumbent} \mid \text{Not vote for incumbent}) = \alpha + \beta_1 \text{economy} + \beta_2 \text{time} + \beta_3 \text{economy} \times \text{time} + \beta_4 \text{socio-demographic yhat} + \beta_5 \text{ideology yhat} + \varepsilon \quad (2)$$

with *economy* being respondents' retrospective sociotropic evaluation of the state of the economy in their country, *time* being the time elapsed since 1970. *Socio-demographic yhat* is the linear prediction of an election-specific estimation of voting for the incumbent with only socio-demographics included as independent variables. *Ideology yhat* is the linear prediction of an election-specific estimation of voting for the incumbent with only left-right self-placement (or party id in the case of Great Britain) included as a predictor of voting for the incumbent.

#### 4.2. *The macro-level*

Our macro-dataset can be defined as a time-series-cross-section (TSCS), and this data structure has to be taken into account when modeling. Before analyzing the data, we verify whether they are stationary. Given that the panel is unbalanced, with more elections included for some countries than what holds for others, we have performed an Im-Pesaran-Shin and a Fisher unit root test, both confirming the stationary nature of the data.<sup>5</sup>

In terms of the estimation, we follow the approach recommended by Beck and Katz and analyze the data by means of OLS regression, with panel corrected standard errors (PCSE) specified (Beck & Katz, 1995; Beck, 2001). The model takes the following form:

$$\text{Incumbent vote share} = \alpha + \beta_1 \text{GDP} + \beta_2 \text{time} + \beta_3 \text{GDP} \times \text{time} + \beta_4 \text{controls} + \varepsilon \quad (3)$$

With *GDP* being the weighted GDP growth rate, one year before the election and *time* being the time since 1950.

As evident from equation (3), this model includes an interaction between GDP and time, which allows examining whether the impact of the economy on incumbents' electoral performance has changed significantly over time.

While the model presented in equation (3) is our basic specification, we also verify whether results are robust when accounting for country-specific heterogeneity by means of the inclusion of country fixed effects and when accounting for serial correlation by means of the inclusion of a lagged dependent variable. The inclusion of a lagged dependent variable in the model additionally serves as control for a potential omitted variable bias.

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<sup>5</sup> The p-values for the test statistics were < 0.001 for both tests.

## 5. RESULTS

### 5.1. *The micro-level*

#### 5.1.1. Country-by-country analyses

We start by investigating the temporal dimension of the economic vote at an individual level. To this end, we examine the impact of economic evaluations on voting for an incumbent party in national elections in Denmark, Germany, Great Britain, the Netherlands, Norway and Sweden. Importantly, Kayser and Wlezien's (2011) assumption that the economic vote is growing stronger over time is based on the assumption that partisanship is decreasing, 'liberating' voters to punish and reward their incumbents. For the six countries under study, it is indeed often claimed that a process of dealignment is at work, as evident from decreasing levels of partisan attachment. An examination of levels of partisan attachment, as measured in Eurobarometer surveys, confirms that the partisan attachments of electorates in most of those countries are weakening over time (see Appendix 3).<sup>6</sup> Surprisingly, this does not hold for the British case.

We estimate a total of 44 logistic regressions explaining voting for one of the incumbent parties in each of these countries. Our interest is mainly in the effect of respondents' retrospective evaluation of the national economy on choosing an incumbent party, but we additionally include a number of control variables in the vote choice models we estimate.

The full results of these regressions are listed in Appendix 4. Reading through these election-specific regression estimations, there clearly is considerable variation. The model fit statistics of the models indicate considerable over-time fluctuation in the explanatory power of the vote choice models, without strong indications of a decrease of how well model performs. In terms of socio-demographics and cleavage variables as well, there is strong variation in the extent to which – even within a single country – particular variables predict the vote choice. For these variables as well, no clear time trend can be observed, and it is noteworthy that some variables are consistently found to be strong predictors throughout the whole time series, as is the case with religion in the Dutch electoral context or social class in Sweden. For ideology,

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<sup>6</sup> Unfortunately the Eurobarometer data (The Mannheim Eurobarometer Trend File, 1970-2002 – ZA3521\_v2-0-1) does not contain information on partisanship in Sweden.

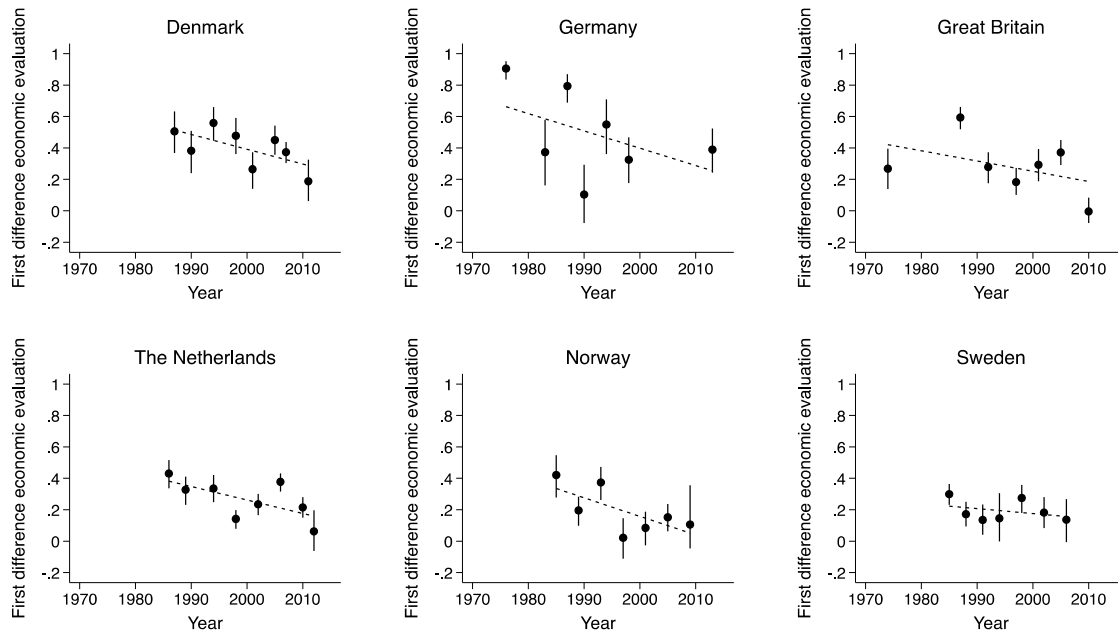
and partisanship in Great Britain, results indicate that these are consistently strong predictors of the vote choice in each of the elections covered.

As holds for the other independent variables as well, there is quite some variation – from country to country and from one election to another – in the extent to which economic evaluations affect the vote choice. As a way to summarize the results and the evolution of the economic vote over time more specifically, we therefore present some simulated quantities of interest in Figure 1. We plot, for each of country in the sample separately, the change in the probability of voting for an incumbent party as a respondent moves from the most negative to the most positive evaluation of the state of the national economy. These predicted probabilities were obtained for each of the election studies separately, and are based on 1,000 simulated observations each time. Just from eyeballing the graphs, it is safe to conclude that our country-specific analyses do not offer evidence for an increase of the economic vote over time. If any trend is to be discerned in the impact of economic evaluations on voting for the incumbent, it might be a slight decrease over time. Especially for the most recent elections, the estimated impact of economic evaluations tends to be rather low.<sup>7</sup>

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<sup>7</sup> We would come to the same substantive conclusion if we simply examined the over-time evolution of the economic evaluation coefficient in each of the countries (see Appendix 5) instead of changes in predicted probabilities.

FIGURE 1. Effect of the economy on voting for the incumbent



*Note:* First difference (and 95%-confidence interval) of voting for the incumbent as economic evaluation moves from least to most positive, with all covariates set at their mean value. Based on 1,000 simulated observations for each of the models presented in Appendix 4. Calculated through Clarify command (King et al., 2000).

### 5.1.2. Pooled analyses

The country-by-country analyses do not offer indications of economic evaluations gaining weight over time and the graphical presentation of the estimated effects in Figure 1 even suggest a slight decrease of their importance. As a way to ascertain this observation, we subsequently pool the 44 elections surveys into a single dataset and examine the impact of economic evaluations on this data pool.

The results of these analyses are presented in Table 1. In Model 1, we first evaluate whether, across the pool, economic evaluations significantly affect voting for an incumbent party. Our results confirm the presence of economic voting in our sample of six West European countries. Respondents' economic evaluation, which we standardized to run from 0 to 1, has a coefficient of about 0.9 and easily reaches statistical significance ( $p < 0.001$ ). Interestingly, this coefficient is close to the estimate Nadeau et al. (2013) obtain when investigating the economic vote in a sample of European democracies (they estimate the effect of economic evaluations on voting for an incumbent party at 1.1). Our results not only indicate that economic evaluations significantly affect voting for the incumbent, they also imply a

substantial effect. As voters move from the most negative to the most positive evaluation of the state of the national economy, their probability to choose an incumbent party more than doubles (odds ratio = 2.34). Additionally, the fact that the socio-demographic and ideology y-hats are both significantly related to voting for an incumbent party confirm the need to control for socio-demographic variables and ideology when explaining the vote in Western Europe.

Having confirmed that voters in the six West European countries under study are economic voters, our attention is now drawn to investigating whether the impact of economic evaluations has changed over time. To this end, in Model 2 we add an interaction term between respondents' economic evaluation and an indicator of time (measured as years since 1970). As can be read from the results in Table 1, we do not find indications of an over-time change in the impact of economic evaluations on choosing an incumbent party. In line with the country-by-country analyses, a negative interaction effect between time and GDP growth rates is hinted at, but this interaction term does not reach a conventional level of statistical significance.

In Model 3 and 4 we further examine whether this result is robust under different model specifications. Given that we are analyzing individuals' vote choices in a large pool of election studies in six different countries, in Model 3 we additionally add country-fixed effects to the model and specify that standard errors should be robust for these country clusters. In Model 4, we go a step further and add a dummy variable for each election sample in the pooled data. Regardless of the exact model specification, our results do not offer any indication of an over-time evolution in the impact of economic evaluations on voting for an incumbent party in the countries under study.



TABLE 1. Explaining voting for the incumbent – individual-level binomial logit estimations (since 1974)

	Model 1	Model 2	Model 3	Model 4
	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Economic evaluation (0-1)	0.859*** (0.032)	0.977*** (0.098)	1.126** (0.388)	1.695*** (0.366)
Time	0.009*** (0.001)	0.011*** (0.002)	0.015* (0.006)	-0.079*** (0.012)
Economic evaluation x Time		-0.005 (0.003)	-0.007 (0.009)	-0.014 (0.012)
Sociodemographics yhat	0.650*** (0.015)	0.651*** (0.015)	0.719*** (0.016)	0.829*** (0.035)
Left-right/partisanship yhat	0.917*** (0.009)	0.916*** (0.009)	0.924*** (0.023)	0.948*** (0.014)
Constant	-0.436*** (0.036)	-0.500*** (0.059)	-0.633** (0.243)	1.314*** (0.239)
Country dummies included?	No	No	Yes	Yes
Election dummies included?	No	No	No	Yes
N	65,337	65,337	65,337	65,337
pseudo-R <sup>2</sup>	0.301	0.301	0.304	0.312
Correctly classified	77.58%	77.56%	77.73%	78.28%

*Note:* Standard errors in Model 3 are robust for 6 country-clusters. Standard errors are robust for 44 election-clusters in Model 4. Significance levels: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001.

In conclusion, our individual-level analyses confirm the presence of economic voting in Western Europe. With few exceptions we observe that, across countries and elections, economic evaluations are significant predictors of choosing an incumbent party. Our pooled analyses furthermore confirm the importance of economic evaluations. With respect to the temporal dimension of the economic vote, however, we offer null results. While the overall trend seems to be decreasing, there are no indications that the impact of economic evaluations is changing significantly over time.

## 5.2. The macro-level

Kayser and Wlezien (2011) have convincingly argued that, as a result of a process of dealignment, the economic vote should increase over time. Our individual-level analyses, however, offer no indications of such a pattern. Even though these micro-findings are strong and robust to different operationalizations, they still might be criticized. An important source of skepticism towards our findings could lie in the fact that they are based on respondents' assessment of the economy and not on the impact of objective and therefore exogenous

economic indicators (Kramer, 1983). As a response to such concerns, we have investigated how well respondents' evaluations of the state of the national economy correlate with an objective economic indicator. For the full individual-level dataset, we find that mean economic evaluations in a particular election correlate significantly but moderately with GDP growth rates in the year preceding the election (pearson correlation coefficient of 0.343,  $p < 0.05$ ). Furthermore, respondents' reported vote as measured in election surveys correlates strongly to the actual vote share incumbents obtain (pearson correlation coefficient of 0.885,  $p < 0.001$ ). Nevertheless, skepticism might remain with respect to the validity of an individual-level analysis. Therefore, in a next step, we examine whether at a macro-level, and when focusing on the impact of the objective economy on incumbents' vote share as well, we would conclude that there are no indications of the economic vote growing stronger over time.

Our macro-level dataset allows investigating the time trend of how the economy affects incumbents' vote share since 1950, which is a larger time frame than our individual-level data allowed investigating. Before examining whether we can observe a pattern of change over time, however, at the macro-level as well we first confirm the presence of an economic vote in Western Europe. The results of Model 1 in Table 2 confirm that GDP growth rates are significantly related to the vote share incumbents obtain in democracies in Western Europe. The coefficient is about 0.9, implying that a one percentage increase in GDP growth results in a 0.9 percentage point increase in incumbent support. Furthermore, in terms of size and significance, this result is robust to controlling for country-specific heterogeneity in the dataset by including country fixed effects in the model (Model 3 in Table 2) and to controlling for an omitted variable bias by means of the inclusion of a lagged dependent variable (Model 5 in Table 2). Interestingly, this estimated impact of GDP growth rates on incumbents' electoral performance is even a bit larger than the effect found by Dassonneville and Lewis-Beck (2014a) for a somewhat larger set of countries. For democracies in Western Europe, we can hence safely conclude that the state of the economy – as reflected in GDP growth rates – affects how incumbents fare on Election Day.

Having confirmed that the economy affects incumbents' vote share in Western Europe, in a next step we examine whether this link has changed over time. Has the economic vote strengthened over time, as Kayser and Wlezien (2011) have claimed? The presence of a temporal trend is examined by the inclusion of an interaction term between GDP growth rates and time (measured as years since 1950). If Kayser and Wlezien (2011) have it right, we

would find a positive and significant interaction term, implying that the impact of GDP growth rates on incumbents' vote shares has increased over time. As evident from the estimates of Model 2 in Table 2, the interaction term is negative and is far from reaching a conventional level of statistical significance. The same holds when we additionally control for country-specific effects by means of the inclusion of country dummies (Model 4) or including a lagged dependent variable (Model 6). These results lead us to conclude that economic voting exists in Western Europe, but has not grown stronger or weakened over time.

TABLE 2. Explaining the incumbent vote share in Western Europe (since 1950)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	b	b	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Incumbent vote share <sub>e-1</sub>					0.859*** (0.039)	0.859*** (0.039)
GDP growth rate	0.917* (0.388)	1.532* (0.699)	0.939** (0.323)	1.232 (0.636)	0.516** (0.169)	0.547 (0.302)
Time	-0.111** (0.043)	-0.052 (0.066)	-0.130*** (0.031)	-0.103 (0.057)	-0.081*** (0.020)	-0.078* (0.030)
GDP growth x Time		-0.019 (0.017)		-0.009 (0.015)		-0.001 (0.008)
Constant	50.264*** (2.222)	48.066*** (3.001)	63.740*** (3.883)	62.563*** (4.462)	7.732* (3.026)	7.622* (3.135)
Country dummies?	No	No	Yes	Yes	Yes	Yes
N elections	240	240	240	240	240	240
N countries	14	14	14	14	14	14
R <sup>2</sup>	0.054	0.057	0.541	0.541	0.876	0.876

Note: OLS regression with panel corrected standard errors (PCSE), estimated through xtpcse in Stata. Significance levels: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. e-1 refers to the previous election.

As evident from the results in Table 2, our macro-analyses indicate the presence of economic voting in Western Europe, but lead to us to reject the claim that the impact of the economy has strengthened over time. In Table 3 we verify whether these conclusions hold when additionally controlling for variables capturing the extent of clarity of responsibility for the economy (Anderson, 2000; Powell & Whitten, 1993). To this end, we replicate the models presented in Table 2 and additionally include a measure of the number of parties in government and a lagged measure of the effective number of parties in a political system. As clear from the results in Table 3, the results are robust to including those indicators. The GDP growth rate in a country is estimated to be significantly related to incumbents' vote share – with a coefficient of about 0.9. There is, however no indication that this effect has been changing significantly since 1950. Furthermore, because the thesis of how clarity of

responsibility affects economic voting implies interactions, we additionally verified whether these results are robust to additionally including interaction terms between GDP and the effective number of parties and the number of parties in government. These results (see Appendix 6) indicate that our results withstand this test as well.

TABLE 3. Explaining the incumbent vote share in Western Europe (since 1950) – robustness: control variables

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	b	b	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Incumbent vote share <sub>e-1</sub>					0.849*** (0.043)	0.850*** (0.043)
GDP growth rate	0.953** (0.327)	0.998 (0.580)	0.911** (0.291)	0.911 (0.559)	0.449** (0.166)	0.269 (0.296)
Time	-0.098* (0.040)	-0.093 (0.061)	-0.134*** (0.033)	-0.134* (0.055)	-0.126*** (0.023)	-0.145*** (0.034)
GDP growth x Time		-0.001 (0.015)		0.000 (0.013)		0.006 (0.007)
ENEP <sub>e-1</sub>	-4.110*** (0.753)	-4.111*** (0.753)	-2.333*** (0.647)	-2.333*** (0.652)	1.249* (0.521)	1.301* (0.527)
# parties in government	9.767*** (0.978)	9.762*** (0.976)	6.735*** (0.795)	6.735*** (0.793)	0.551 (0.521)	0.564 (0.522)
Constant	44.755*** (2.522)	44.610*** (2.930)	59.098*** (3.579)	59.099*** (4.006)	5.524 (3.178)	6.6066 (3.222)
Country dummies?	No	No	Yes	Yes	Yes	Yes
N elections	240	240	240	240	240	240
N countries	14	14	14	14	14	14
R <sup>2</sup>	0.396	0.396	0.655	0.655	0.884	0.884

Note: OLS regression with panel corrected standard errors (PCSE), estimated through xtpcse in Stata. Significance levels: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. e-1 refers to the previous election.

## 6. CHALLENGES

In contrast to what Kayser and Wlezien (2011) have suggested, our results do not offer indications of a growing economic vote in Western Europe. Our individual-level analyses on six European democracies offer no indications of an increased importance of economic evaluations for explaining the vote. Furthermore, our macro-level analyses of incumbents' vote share in a large pool of West European democracies do not hint at a growing economic vote either. Our aggregate-level analyses hence match our individual-level observations in showing the absence of a temporal dimension of economic voting in Western Europe. These

results are strong, but a number of challenges could still be raised against our findings. In what follows, we address such challenges, further verifying the robustness of our results.

First, while the country-by-country analyses of the impact of economic evaluations on the vote suggested a slight decrease, the macro-analyses led us to refute any claims of the presence of a temporal dimension in economic voting in Western Europe. Importantly, the time frame of our micro- and macro-analyses differs. And it could be claimed that – if the trend in economic voting would be decreasing – this is a fairly recent evolution. If so, analyzing changes over too extended a time period could mask this more recent time trend. Therefore, as an additional robustness test, we investigate the economic vote when limiting the aggregate-level analyses to elections since 1974 – which corresponds to the time frame of our micro-analyses. As evident from the results in Table 4, the effect of GDP growth rates on incumbents' vote share is still in expected directions in the main models (Model 1, 3 and 5), although the significance level drops. Without any doubt, this is due to the reduced sample size. Importantly, with respect to the temporal dimension of the economic vote, our conclusion holds for a test on this shorter time frame as well; there are no indications that the economic vote is changing significantly over time – confirming the results of our individual-level analyses on a pooled dataset of election surveys. Additionally the same holds when further restricting the aggregate-level analysis to only those elections included in the micro-analyses. Due to a further reduction of the sample size, the impact of GDP growth rates no longer reaches a conventional level of statistical significance, but the sign of GDP on incumbents' vote share is still in expected directions in two of the main models. No indications of a temporal trend in the impact of GDP is hinted at, however (see Appendix 7).

TABLE 4. Explaining the incumbent vote share in Western Europe (since 1974)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	b	b	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Incumbent vote share <sub>e-1</sub>					0.741*** (0.056)	0.741*** (0.056)
GDP growth rate	0.501 (0.504)	-1.470 (1.681)	0.781* (0.316)	0.214 (1.087)	0.561* (0.234)	-0.072 (0.860)
Time	-0.113 (0.083)	-0.215 (0.131)	-0.122** (0.042)	-0.151* (0.065)	-0.115** (0.033)	-0.147** (0.050)
GDP growth x Time		0.044 (0.032)		0.012 (0.023)		0.014 (0.018)
Constant	51.356*** (4.484)	56.181*** (6.757)	58.728*** (3.393)	60.096*** (4.093)	15.200*** (3.633)	16.706*** (4.317)
Country dummies?	No	No	Yes	Yes	Yes	Yes
N elections	154	154	154	154	154	154
N countries	14	14	14	14	14	14
R <sup>2</sup>	0.020	0.029	0.659	0.659	0.843	0.843

Note: OLS regression with panel corrected standard errors (PCSE), estimated through xtpcse in Stata.

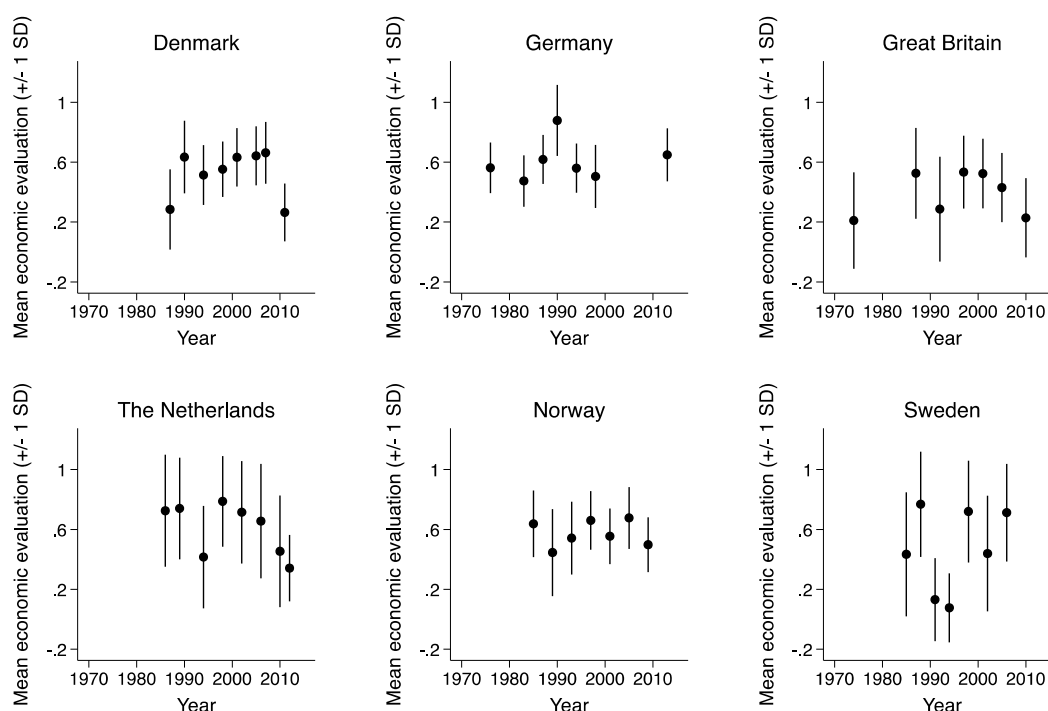
Significance levels: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. e-1 refers to the previous election.

Second, our pooled analyses of 44 national election surveys did not offer indications of a temporal trend in the importance of economic evaluations for predicting the vote. The country-by-country analyses revealed however that in four of the six countries under study – Great Britain, the Netherlands, Norway and Sweden – the impact of economic evaluations is not significant in the most recent election in the time series. Additionally, even though the effect of economic evaluations is still significant in the Danish 2011 election, its effect is only half the size of what holds for the other elections examined. Is this an indication of an erosion of economic voting? We argue that another issue might be causing the reduction of the estimated impact of the economic vote in these elections: a restricted variance problem in times of economic crisis. If so, the decline of the economic vote in the most recent elections should not be interpreted as an indication of a more general decreasing trend, but as a consequence of a measurement problem in times of crisis. We hence further investigate this possibility.

We look at some descriptive statistics of individuals' evaluation of the state of the national economy. Figure 2 graphically presents respondents' mean evaluation of the economy (standardized to run from 0 to 1 in all samples) for each of the election samples. These descriptives indicate that economic evaluations were indeed at their lowest level in the most recent elections in the case of Denmark, Great Britain and the Netherlands. For Sweden, the

lowest mean evaluation of the state of the economy is found in 1994, an election for which we estimated economic evaluations not to be affecting voting for the incumbent (see Appendix 4). Clearly, there are some indications that the variance in economic evaluations is indeed more restricted in times of crisis. This methodological issue could be causing the somewhat lower economic voting estimates in the most recent elections. If so, we are underestimating the extent to which the economy affected vote choices in those recent elections – which would make for even more stability than our analyses hint at.

FIGURE 2. Mean economic evaluation in individual-level election surveys



*Note:* Mean economic evaluations (sociotropic and retrospective) and 95%-confidence intervals in national election surveys.

## 7. DISCUSSION

We started this paper from the assumption that voting behavior is changing over time. More specifically, in line with previous research, we expected to observe a shift from the long-term towards short-term determinants of the vote. Our analyses of what explains the vote choice, in terms of incumbent support, in six West European democracies are not in line with this expectation. Across several decades, we observe that the model fit statistics are fluctuating

strongly, with numbers rising or falling suddenly over time. Estimating a basic model of the vote in elections over an extended time period does not hint at models performing worse over time. In sum, it appears that the laws of democratic political behavior, such as they are, still work in the same way.

With respect to economic voting more specifically, we find strong evidence of economic voting. Economic evaluations are important predictors of whether or not voters choose an incumbent party and incumbents' vote share is dependent on objective economic conditions, such as economic growth. Voters in Western Europe are found to be economic voters.

As for the temporal trend, in line with previous research we assumed the process of dealignment to have led to an over-time increase of the economic vote. Our results, however, lead us to refute claims of economic voting being strengthened. First, our individual-level analyses on six Western European democracies are not showing an increase of the impact of economic evaluations on the vote. If a trend is to be discerned in our estimates, it is a decreasing one with especially the most recent crisis elections featuring weak effects. Overall, however, it is safe to conclude that there is simply no change in the economic vote. We argue so, first because this slight drop in the effect could be attributable to a restriction in variance of economic attitudes recently brought by the Great Recession. Second, and more importantly, our analysis on the pooled individual-level data shows the absence of any time trend in the strength of economic evaluations. These null results at the micro-level receive further confirmation when analyzing aggregate-level data. While economic growth affects how incumbents fare in elections in Western Europe, there are no indications of this impact having grown stronger since the 1950s. Our results furthermore are robust to using different estimation techniques, to adding a number of controls or to some additional tests. Consequently, we can confidently conclude from our results that the economic vote has not increased over time.

Economic voting effects are stable over time, despite the apparent opportunity for economic voting afforded by the social and political dealignment occurring across the electorates of the region. Perhaps the impact of dealignment on economic voting is counterbalanced by other processes of change, and the trend towards economic globalization seems a likely candidate to have done so. Without evidence of a temporal trend in economic voting, it should be investigated why the process of dealignment has not led to a growth of the economic vote.



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APPENDIX 1. Elections included in the analyses (micro-level)

Country	Election	Data source	Question wording economic evaluation	Incumbent parties <sup>8</sup>
Denmark	1987	Provided by Rune Stubager [DDA87_88 file]		KF, V, CD, KRF
Denmark	1990	Provided by Rune Stubager [DDA90 file]		KF, V, RV
Denmark	1994	Centre for Survey and Survey/Register Data ( <a href="http://www.surveybanken.aau.dk">http://www.surveybanken.aau.dk</a> )	How would you assess the economic situation of Denmark today, compared to the situation one year ago? -Much better -Somewhat better -No change -Somewhat worse -Much worse	SD, CD, RV, KRF
Denmark	1998	Centre for Survey and Survey/Register Data ( <a href="http://www.surveybanken.aau.dk">http://www.surveybanken.aau.dk</a> )	How would you assess the economic situation of Denmark today, compared to the situation one year ago? -Much better -Somewhat better -No change -Somewhat worse -Much worse	SD, RV
Denmark	2001	Centre for Survey and Survey/Register Data ( <a href="http://www.surveybanken.aau.dk">http://www.surveybanken.aau.dk</a> )	How would you assess the economic situation of Denmark today, compared to the situation one year ago? -Much better -Somewhat better -No change -Somewhat worse -Much worse	SD, RV
Denmark	2005	Centre for Survey and Survey/Register Data ( <a href="http://www.surveybanken.aau.dk">http://www.surveybanken.aau.dk</a> )	How would you assess the economic situation of Denmark today, compared to	V, KF

<sup>8</sup> Information on what parties are to be considered incumbents comes from the ParlGov Database (Döring, Holger and Philip Manow. 2012. Parliament and government composition database (ParlGov): An infrastructure for empirical information on parties, elections and governments in modern democracies. Version 12/10 – 15 October 2012).

			<p>the situation one year ago?</p> <ul style="list-style-type: none"> <li>-Much better</li> <li>-Somewhat better</li> <li>-No change</li> <li>-Somewhat worse</li> <li>-Much worse</li> </ul>	
Denmark	2007	Centre for Survey and Survey/Register Data ( <a href="http://www.surveybanken.aau.dk">http://www.surveybanken.aau.dk</a> )	<p>How would you assess the economic situation of Denmark today, compared to the situation one year ago?</p> <ul style="list-style-type: none"> <li>-Much better</li> <li>-Somewhat better</li> <li>-No change</li> <li>-Somewhat worse</li> <li>-Much worse</li> </ul>	V, KF
Denmark	2011	Centre for Survey and Survey/Register Data ( <a href="http://www.surveybanken.aau.dk">http://www.surveybanken.aau.dk</a> )	<p>How would you assess the economic situation of Denmark today, compared to the situation one year ago?</p> <ul style="list-style-type: none"> <li>-Much better</li> <li>-Somewhat better</li> <li>-No change</li> <li>-Somewhat worse</li> <li>-Much worse</li> </ul>	V, KF
Germany	1976	The European Voter dataset (Gesis Study Number ZA3911)	<p>What is your general assessment of the current economic situation in Germany?</p> <ul style="list-style-type: none"> <li>-Very good</li> <li>-Good</li> <li>-Neither good, neither bad</li> <li>-Bad</li> <li>-Very bad</li> </ul>	SPD, FDP
Germany	1983	The European Voter dataset (Gesis Study Number ZA3911)	<p>What is your general assessment of the current economic situation in Germany?</p> <ul style="list-style-type: none"> <li>-Very good</li> <li>-Good</li> <li>-Neither good, neither bad</li> <li>-Bad</li> </ul>	CDU, CSU, FDP

			-Very bad	
Germany	1987	The European Voter dataset (Gesis Study Number ZA3911)	What is your general assessment of the current economic situation in Germany? -Very good -Good -Neither good, neither bad -Bad -Very bad	CDU, CSU, FDP
Germany	1990	The European Voter dataset (Gesis Study Number ZA3911)	What is your general assessment of the current economic situation in Germany? -Very good -Good -Neither good, neither bad -Bad -Very bad	CDU, CSU, FDP
Germany	1994	The European Voter dataset (Gesis Study Number ZA3911)	What is your general assessment of the current economic situation in Germany? -Very good -Good -Neither good, neither bad -Bad -Very bad	CDU, CSU, FDP
Germany	1998	The European Voter dataset (Gesis Study Number ZA3911)	What is your general assessment of the current economic situation in Germany? -Very good -Good -Neither good, neither bad -Bad -Very bad	CDU, CSU, FDP
Germany	2013	German Longitudinal Election Study 2013 (Gesis Study Number ZA5700, v 1.0.0.)	What is your general assessment of the current economic situation in Germany? -Very good -Good -Neither good, neither bad -Bad	CDU, CSU, FDP



			-Very bad	
Great Britain	1974 october	British Election Study 1974 october (UK Data Archive)	Looking back over the last 6 months, would you say that the state of Britain's econmy has stayed about the same, got better, or got worse?	LAB
Great Britain	1987	British Election Study 1987 (UK Data Archive)	[National economy last 12 months] -Got a lot better -Got a little better -Stayed the same -Got a little worse -Got a lot worse	CON
Great Britian	1992	British Election Study 1992 (UK Data Archive)	Looking back over the last year or so, would you say that Britain's economy has... -Got stronger -Got weaker -Or, stayed about the same	CON
Great Britain	1997	British Election Study 1997 (UK Data Archive)	And how do you think the general economic situation in Britain has changed over the last 12 months? Has it -Got a lot better -Got a little better -Stayed the same -Got a little worse -Got a lot worse	CON
Great Britain	2001	British Election Study 2001 (UK Data Archive)	How do you think the general economic situation in this country has changed over the last 12 months. Has it... -Got a lot worse -Got a little worse -Stayed the same -Got a little better -Got a lot better	LAB
Great Britain	2005	British Election Study 2005 (UK Data Archive)	How do you think the general economic situation in this country has changed	LAB

			<p>over the last 12 months.</p> <ul style="list-style-type: none"> <li>-Got a lot worse</li> <li>-Got a little worse</li> <li>-Stayed the same</li> <li>-Got a little better</li> <li>-Got a lot better</li> </ul>	
Great Britain	2010	British Election Study 2010 (UK Data Archive)	<p>How do you think the general economic situation in this country has changed over the last 12 months. Has it:</p> <ul style="list-style-type: none"> <li>-Got a lot worse</li> <li>-Got a little worse</li> <li>-Stayed the same</li> <li>-Got a little better</li> <li>-Got a lot better</li> </ul>	LAB
The Netherlands	1986	The European Voter dataset (Gesis Study Number ZA3911)	I would now like to ask you a few questions about what you think of the policies the government has conducted during the past four years (...). Do you think that the economic situation has been influenced favorably, unfavorably or neither by the government policies?	CDA, VVD
The Netherlands	1989	The European Voter dataset (Gesis Study Number ZA3911)	I would now like to ask you a few questions about what you think of the policies the government has conducted during the past four years (...). Do you think that the economic situation has been influenced favorably, unfavorably or neither by the government policies?	CDA, VVD
The Netherlands	1994	The European Voter dataset (Gesis Study Number ZA3911)	I would now like to ask you a few questions about what you think of the policies the government has conducted during the past four years (...). Do you think that the economic situation has been influenced favorably, unfavorably or neither by the government policies?	CDA, PVDA

The Netherlands	1998	The European Voter dataset (Gesis Study Number ZA3911)	I would now like to ask you a few questions about what you think of the policies the government has conducted during the past four years (...). Do you think that the economic situation has been influenced favorably, unfavorably or neither by the government policies?	PVDA, VVD, D66
The Netherlands	2002	Dutch Parliamentary Election Study 2002/2003 ( <a href="http://www.dpes.nl">www.dpes.nl</a> )	I would now like to ask you a few questions about what you think of the policies the government has conducted during the past four years (...). Do you think that the economic situation has been influenced favorably, unfavorably or neither by the government policies?	PVDA, VVD, D66
The Netherlands	2006	Dutch Parliamentary Election Study 2006 ( <a href="http://www.dpes.nl">www.dpes.nl</a> )	I would now like to ask you a few questions about what you think of the policies the government has conducted during the past four years (...). Do you think that the economic situation has been influenced favorably, unfavorably or neither by the government policies?	CDA, VVD, D66
The Netherlands	2010	Dutch Parliamentary Election Study 2010 ( <a href="http://www.dpes.nl">www.dpes.nl</a> )	I would now like to ask you a few questions about what you think of the policies the government has conducted during the past four years (...). Do you think that the economic situation has been influenced favorably, unfavorably or neither by the government policies?	CDA, PVDA, CU
The Netherlands	2012	Dutch Parliamentary Election Study 2012 ( <a href="https://easy.dans.knaw.nl/ui/datasets/id/easy-dataset:57353/tab/2">https://easy.dans.knaw.nl/ui/datasets/id/easy-dataset:57353/tab/2</a> )	Would you say that over the past twelve months, the Dutch economy's condition has gotten better, stayed about the same or gotten worse? -- Much better or slightly better? -- Much worse or somewhat worse?	VVD, CDA
Norway	1985	The European Voter dataset (Gesis Study	Would you say that the economic	H, KRF, SP

		Number ZA3911)	situation in the country has improved the last 12 months, is it almost unchanged or is it worse today? -- Would you say much better or a bit better -- Would you say much worse or a bit worse	
Norway	1989	The European Voter dataset (Gesis Study Number ZA3911)	Would you say that the economic situation in the country has improved the last 12 months, is it almost unchanged or is it worse today? -- Would you say much better or a bit better -- Would you say much worse or a bit worse	DNA
Norway	1993	The European Voter dataset (Gesis Study Number ZA3911)	Would you say that the economic situation in the country has improved the last 12 months, is it almost unchanged or is it worse today? -- Would you say much better or a bit better -- Would you say much worse or a bit worse	DNA
Norway	1997	The European Voter dataset (Gesis Study Number ZA3911)	Would you say that the economic situation in the country has improved the last 12 months, is it almost unchanged or is it worse today? -- Would you say much better or a bit better -- Would you say much worse or a bit worse	DNA
Norway	2001	Norwegian Election survey 2001 (Norwegian Social Science Data Service – NSD)	Would you say that the economic situation in the country has improved the last 12 months, is it almost unchanged or is it worse today?	DNA

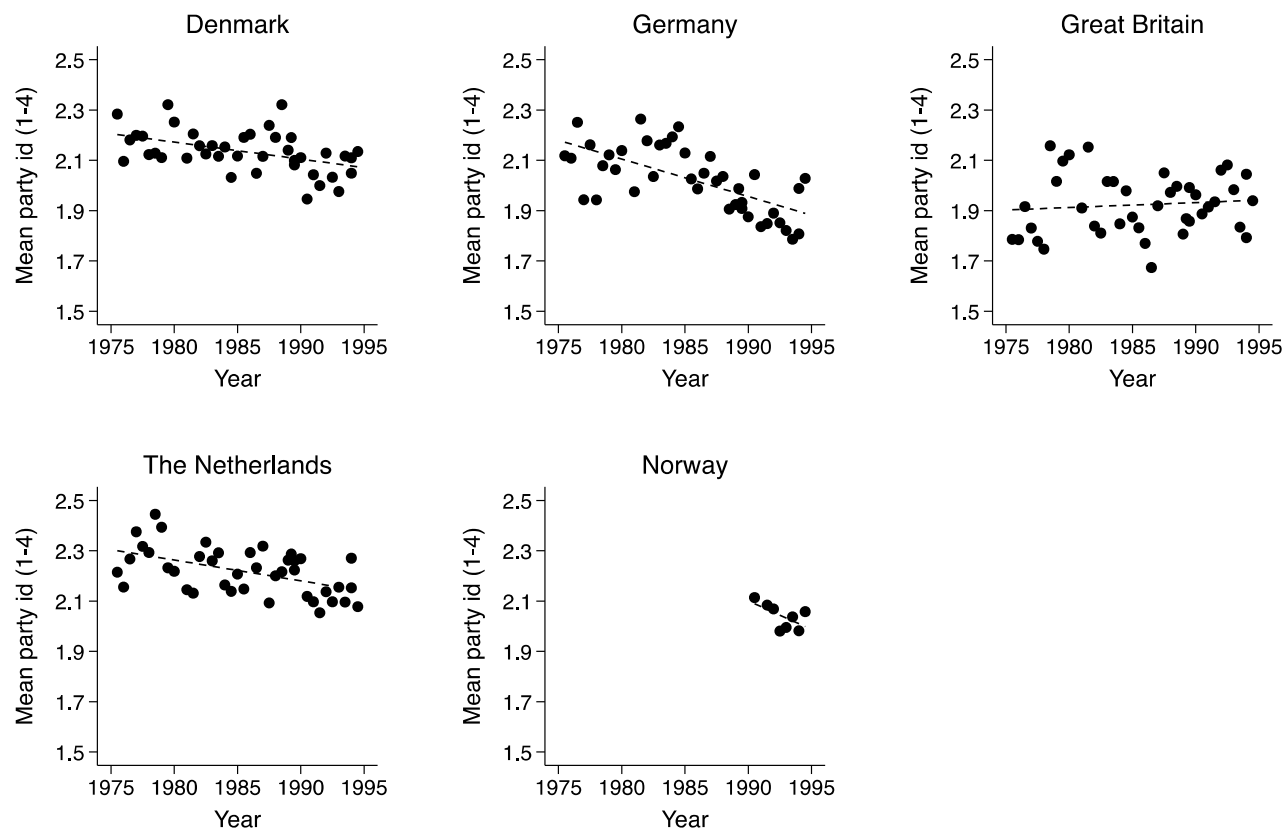
			-- Would you say much better or a bit better -- Would you say much worse or a bit worse	
Norway	2005	Norwegian Election survey 2005 (Norwegian Social Science Data Service – NSD)	Would you say that the economic situation in the country has improved the last 12 months, is it almost unchanged or is it worse today? -- Would you say much better or a bit better -- Would you say much worse or a bit worse	KRF, H, V
Norway	2009	Norwegian Election survey 2009 (Norwegian Social Science Data Service – NSD)	Would you say that the economic situation in the country has improved the last 12 months, is it almost unchanged or is it worse today? -- Would you say much better or a bit better -- Would you say much worse or a bit worse	DNA, SV, SP
Sweden	1985	The European Voter dataset (Gesis Study Number ZA3911)	How has, in your opinion, the Swedish economy changed in the last two or three years? Has it improved, remained about the same or has it got worse?	SAP
Sweden	1988	The European Voter dataset (Gesis Study Number ZA3911)	How has, in your opinion, the Swedish economy changed in the last two or three years? Has it improved, remained about the same or has it got worse?	SAP
Sweden	1991	The European Voter dataset (Gesis Study Number ZA3911)	How has, in your opinion, the Swedish economy changed in the last two or three years? Has it improved, remained about the same or has it got worse?	SAP
Sweden	1994	The European Voter dataset (Gesis Study Number ZA3911)	How has, in your opinion, the Swedish economy changed in the last two or three years? Has it improved, remained about	MSP, FP, C, KS

			the same or has it got worse?	
Sweden	1998	The European Voter dataset (Gesis Study Number ZA3911)	How has, in your opinion, the Swedish economy changed in the last 12 months? Has it improved, remained about the same or has it got worse?	SAP
Sweden	2002	Swedish Election Study 2002 (SND 0812)	Would you say that the economic situation in Sweden has improved, remained the same or gone worse during the last 12 months?	SAP
Sweden	2006	Swedish Election Study 2006 (SND 0861)	Would you say that the economic situation in Sweden has improved, remained the same or gone worse during the last 12 months?	SAP

APPENDIX 2. Elections included in the analysis (macro-level)

Country	Time frame	Number of elections
Austria	1953-2013	19
Belgium	1954-2014	19
Denmark	1953-2011	23
Finland	1954-2011	16
France	1956-2012	15
Iceland	1953-2013	19
Ireland	1954-2011	17
Luxembourg	1954-2013	13
The Netherlands	1956-2012	18
Norway	1953-2013	16
Sweden	1956-2014	19
Switzerland	1955-2011	15
United Kingdom	1955-2010	15
(West) Germany	1953-2013	16
TOTAL		240

### APPENDIX 3. Trends in partisan attachment in Denmark, Germany, Great Britain, The Netherlands and Norway (Eurobarometer trendfile)



*Note:* Mean levels of partisan attachment (on 1 to 4-scale, with 1 = no attachment, 2 = merely a sympathizer, 3 = fairly strong, 4 = very strong) in Eurobarometer surveys. Linear trend line added (dashed). Source: The Mannheim Eurobarometer Trend File, 1979-2002, v2-0-1. [Dataset]. Cologne: Gesis.



APPENDIX 4. Explaining voting for the incumbent in Denmark, Germany, Great Britain, the Netherlands, Norway and Sweden (full results)

TABLE 1. Voting for the incumbent in Denmark (1987-2011)

	1987	1990	1994	1998	2001	2005	2007	2011
	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)
Female	0.449* (0.188)	0.357 (0.222)	0.187 (0.123)	-0.094 (0.128)	0.277* (0.121)	0.267* (0.132)	-0.076 (0.089)	0.036 (0.138)
Age	0.021** (0.006)	0.105** <sup>a</sup> (0.034)	0.006 (0.004)	-0.002 (0.005)	0.004 (0.004)	0.004 (0.004)	0.008** (0.003)	0.003 (0.004)
Education (0-1)	0.282 (0.315)	1.495*** (0.361)	-0.892*** (0.205)	-1.103*** (0.206)	-0.701*** (0.203)	0.298 (0.214)	0.187 (0.126)	0.334 (0.224)
Income (0-1)		0.646 (0.503)	-0.799* (0.344)	-0.016 (0.394)	-0.066 (0.284)	1.818*** (0.308)	1.425*** (0.197)	0.580 (0.309)
Urbanization (0-1)		0.663 (0.357)	-0.188 (0.198)	-0.022 (0.075)	0.051 (0.179)	-0.208 (0.184)	-0.529*** (0.130)	-0.474* (0.213)
Left right (0-1)	0.859*** (0.078)	7.431*** (0.645)	-3.240*** (0.296)	-3.799*** (0.308)	-4.113*** (0.296)	6.725*** (0.363)	4.830*** (0.198)	5.572*** (0.340)
<b>Economy (0-1)</b>	<b>2.294*** (0.366)</b>	<b>2.542*** (0.565)</b>	<b>2.643*** (0.324)</b>	<b>2.404*** (0.346)</b>	<b>1.370*** (0.311)</b>	<b>2.511*** (0.355)</b>	<b>2.072*** (0.231)</b>	<b>0.973*** (0.337)</b>
Constant	-7.091*** (0.597)	-9.055*** (0.808)	0.472 (0.387)	0.917* (0.405)	0.709 (0.382)	-7.061*** (0.459)	-5.492*** (0.298)	-4.878*** (0.397)
<i>N</i>	787	668	1,466	1,481	1,648	1,774	3,435	1,589
pseudo <i>R</i> <sup>2</sup>	0.305	0.372	0.157	0.154	0.143	0.314	0.266	0.235
Correctly classified	79.67%	83.23%	69.58%	67.93%	67.84%	78.69%	77.90%	75.90%
Area under the ROC curve	0.869	0.890	0.759	0.767	0.769	0.861	0.835	0.825

Source: Danish election surveys 1994-2011, obtained from [www.surveybank.dk](http://www.surveybank.dk). 1987 and 1990 election surveys obtained from Rune Stubager. Standard errors in parentheses. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . <sup>a</sup> Age measured in age categories.

TABLE 2. Voting for the incumbent in Germany (1976-2013)

	1976	1983	1987	1990	1994	1998	2013
	b	b	b	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Female	0.203 (0.197)	-0.281 (0.169)	0.098 (0.167)	-0.103 (0.184)	-0.092 (0.182)	0.316* (0.152)	0.281* (0.135)
Age	-0.004 (0.006)	0.007 (0.005)	0.009 (0.005)	0.006 (0.006)	0.010 (0.006)	0.012* (0.005)	0.009* (0.004)
Education (0-1)	-0.901** (0.309)	0.379 (0.271)	0.773** (0.263)	0.424 (0.248)	-0.054 (0.273)	0.342 (0.198)	-0.061 (0.292)
Religious attendance (0-1)	-2.124*** (0.321)	1.209*** (0.272)	1.438*** (0.281)	1.648*** (0.286)	1.036** (0.320)	1.534*** (0.253)	1.520*** (0.304)
Professional status (0-1)	-0.112 (0.352)	0.265 (0.283)	0.807** (0.289)	0.214 (0.283)	-0.245 (0.319)	0.571 (0.295)	
Social class (0-1)	0.393 (0.276)	-0.362 (0.275)	-0.234 (0.261)	0.176 (0.278)	-0.368 (0.281)	-0.265 (0.243)	0.562 (0.422)
Urbanization (0-1)	0.203 (0.197)	-0.281 (0.169)	0.098 (0.167)	-0.103 (0.184)	-0.092 (0.182)	0.316* (0.152)	-0.070 (0.192)
East-Germany					1.234*** (0.215)	-0.011 (0.172)	0.856*** (0.163)
Left right (0-1)	-9.708*** (0.747)	6.479*** (0.515)	7.181*** (0.496)	5.805*** (0.535)	8.598*** (0.669)	3.920*** (0.404)	7.057*** (0.474)
<b>Economy (0-1)</b>	<b>6.211***</b> <b>(0.696)</b>	<b>1.599**</b> <b>(0.498)</b>	<b>4.600***</b> <b>(0.558)</b>	<b>0.429</b> <b>(0.389)</b>	<b>2.501***</b> <b>(0.579)</b>	<b>1.456***</b> <b>(0.371)</b>	<b>1.873***</b> <b>(0.403)</b>
Constant	2.680*** (0.613)	-4.647*** (0.502)	-8.090*** (0.576)	-4.357*** (0.543)	-6.051*** (0.598)	-4.820*** (0.470)	-6.249*** (0.505)
<i>N</i>	956	882	1,113	743	853	976	1325
pseudo <i>R</i> <sup>2</sup>	0.494	0.278	0.399	0.237	0.338	0.160	0.241
Correctly classified	85.15%	77.55%	81.58%	75.24%	79.13%	71.82%	76.15%
Area under the ROC curve	0.925	0.839	0.893	0.821	0.869	0.763	0.826

Source: 1976-1998: The European Voter Dataset; 2013: GLES 2013. Standard errors in parentheses \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

TABLE 3. Voting for the incumbent in Great Britain (1974-2010) – Vote for incumbent

	1974 oct	1987	1992	1997	2001	2005	2010
	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)	b (s.e.)
Female	-0.110 (0.188)	0.152 (0.147)	0.277 (0.162)	0.553** (0.201)	0.040 (0.127)	0.229* (0.097)	0.031 (0.166)
Age	-0.018** (0.006)	0.085*** <sup>a</sup> (0.020)	0.016** (0.005)	0.012 (0.006)	0.025*** (0.004)	0.003 (0.003)	0.001 (0.005)
Religious denomination					0.042 (0.133)	0.140 (0.102)	
Religious attendance (0-1)			-0.356 (0.212)	0.008 (0.267)			1.168** (0.370)
Religiosity (0-1)	-0.279 (0.284)						
Social class (0-1)		0.785** (0.294)	0.865*** (0.189)	-0.013 (0.243)	-0.260 (0.142)	-0.340** (0.109)	-0.325
Income (0-1)	-0.988* (0.390)		1.402*** (0.296)	0.505 (0.360)	0.364 (0.233)	-0.024 (0.178)	(0.185)
Incumbent party ID	4.790*** (0.192)	3.188*** (0.145)	4.770*** (0.162)	5.253*** (0.215)	3.242*** (0.146)	1.567*** (0.117)	3.217*** (0.178)
<b>Economy (0-1)</b>	<b>1.103*** (0.289)</b>	<b>4.069*** (0.339)</b>	<b>1.202*** (0.229)</b>	<b>2.051*** (0.438)</b>	<b>1.550*** (0.287)</b>	<b>1.814*** (0.213)</b>	<b>-0.046 (0.310)</b>
Constant	-1.209** (0.381)	-5.631*** (0.330)	-4.951*** (0.375)	-5.969*** (0.534)	-4.563*** (0.356)	-2.114*** (0.236)	-2.666*** (0.372)
<i>N</i>	1,605	2,084	2,379	2,103	1,981	2,476	1,279
pseudo <i>R</i> <sup>2</sup>	0.599	0.515	0.635	0.662	0.373	0.107	0.341
Correctly classified	91.78%	87.43%	92.43%	93.91%	81.63%	74.64%	83.42%
Area under the ROC curve	0.935	0.932	0.952	0.956	0.876	0.712	0.859

Source: British election studies, UK Data archive. Standard errors in parentheses \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . <sup>a</sup> Age categories.

TABLE 4. Voting for the incumbent in The Netherlands (1986-2010) – Vote for incumbent

	1986	1989	1994	1998	2002	2006	2010	2012
	b	b	b	b	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Female	0.093 (0.170)	0.295* (0.147)	-0.064 (0.129)	0.256* (0.124)	0.126 (0.121)	-0.029 (0.118)	0.033 (0.116)	0.005 (0.136)
Age	0.003 (0.005)		0.030*** (0.004)	-0.006 (0.004)	0.008 (0.004)	0.012** (0.004)	0.012*** (0.004)	0.014*** (0.004)
Education (0-1)	-0.642* (0.252)	-0.215 (0.192)	0.448** (0.165)	0.310 (0.176)	0.598* (0.250)	0.353 (0.237)	-0.490* (0.228)	0.486 (0.269)
Religious attendance (0-1)	0.375 (0.227)	0.178 (0.194)	0.835*** (0.190)	-2.726*** (0.186)	-2.168*** (0.220)	-0.584** (0.185)	2.378*** (0.196)	-0.126 (0.208)
Social class (0-1)	1.475*** (0.342)	1.642*** (0.305)	-1.129*** (0.263)	0.088 (0.273)	0.431 (0.287)	1.402*** (0.274)	-0.359 (0.263)	1.526*** (0.322)
Urbanization (0-1)	0.129 (0.249)	-0.229 (0.210)	-0.558** (0.191)	-0.270 (0.191)	-0.250 (0.185)	-0.571** (0.191)	-0.180 (0.179)	-0.494* (0.219)
Left right (0-1)	5.754*** (0.441)	5.552*** (0.373)	-1.519*** (0.289)	0.890** (0.293)	-0.584* (0.292)	6.728*** (0.363)	-2.331*** (0.257)	5.683*** (0.391)
<b>Economy (0-1)</b>	<b>2.000*** (0.275)</b>	<b>1.501*** (0.251)</b>	<b>1.401*** (0.195)</b>	<b>1.348*** (0.202)</b>	<b>1.149*** (0.188)</b>	<b>1.780*** (0.171)</b>	<b>0.964*** (0.157)</b>	<b>0.265 (0.305)</b>
Constant	-5.122*** (0.445)	-4.803*** (0.345)	-1.094*** (0.300)	0.049 (0.321)	-1.443*** (0.363)	-6.205*** (0.384)	-0.266 (0.327)	-5.277*** (0.451)
<i>N</i>	1,071	1,294	1,190	1,490	1,425	1,930	1,696	1,304
pseudo <i>R</i> <sup>2</sup>	0.407	0.340	0.126	0.172	0.117	0.330	0.151	0.222
Correctly classified	83.85%	81.30%	66.89%	74.63%	67.72%	78.65%	72.52%	74.77%
Area under the ROC curve	0.892	0.868	0.732	0.761	0.722	0.862	0.750	0.810

Source: 1986-1998: The European Voter Dataset. 2002, 2006, 2010 and 2012: Dutch Parliamentary Election Survey (DPES) 2002-2003, 2006, 2010 and 2012. Standard errors in parentheses \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

TABLE 5. Voting for the incumbent in Norway (1985-2009)

	1985	1989	1993	1997	2001	2005	2009
	b	b	b	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Female	0.278 (0.156)	0.023 (0.125)	0.012 (0.122)	-0.153 (0.116)	0.036 (0.146)	0.154 (0.141)	0.001 (0.156)
Age	0.014** (0.005)	0.012** (0.004)	0.003 (0.004)	0.003 (0.004)	0.016*** (0.005)	0.010* (0.005)	0.004 (0.005)
Education (0-1)	1.336*** (0.247)	-1.827*** (0.208)	-1.033*** (0.189)	-1.319*** (0.192)			
Religious attendance (0-1)	3.314*** (0.714)	-2.223** (0.719)	-3.313*** (0.675)	-2.091*** (0.583)	0.107 (0.815)	4.165*** (0.765)	-1.937* (0.988)
Income (0-1)	0.216 (0.221)	0.141 (0.192)	0.124 (0.155)	0.482** (0.155)	4.377* (1.968)	8.223*** (1.281)	-1.934 (1.194)
Urbanization (0-1)	-0.795*** (0.182)	0.296* (0.149)	0.540*** (0.149)	0.765*** (0.194)	0.496* (0.193)	1.773*** (0.333)	-0.195 (0.164)
Left right (0-1)	11.540*** (0.578)	-4.634*** (0.345)	-3.468*** (0.333)	-3.274*** (0.282)	-3.972*** (0.369)	5.268*** (0.371)	-10.040*** (0.547)
Economy (0-1)	<b>1.912***</b> <b>(0.383)</b>	<b>0.962***</b> <b>(0.222)</b>	<b>1.716***</b> <b>(0.263)</b>	<b>0.122</b> <b>(0.296)</b>	<b>0.561</b> <b>(0.388)</b>	<b>1.083**</b> <b>(0.339)</b>	<b>0.654</b> <b>(0.430)</b>
Constant	-8.844*** (0.525)	1.325*** (0.329)	0.452 (0.336)	0.756* (0.358)	-0.897* (0.404)	-6.963*** (0.457)	5.443*** (0.499)
<i>N</i>	1,628	1,682	1,472	1,606	1,336	1,575	1,318
pseudo <i>R</i> <sup>2</sup>	0.475	0.206	0.135	0.107	0.112	0.267	0.410
Correctly classified	86.98%	73.72%	69.23%	66.31%	77.32%	78.92%	83.76%
Area under the ROC curve	0.921	0.802	0.744	0.722	0.747	0.850	0.901

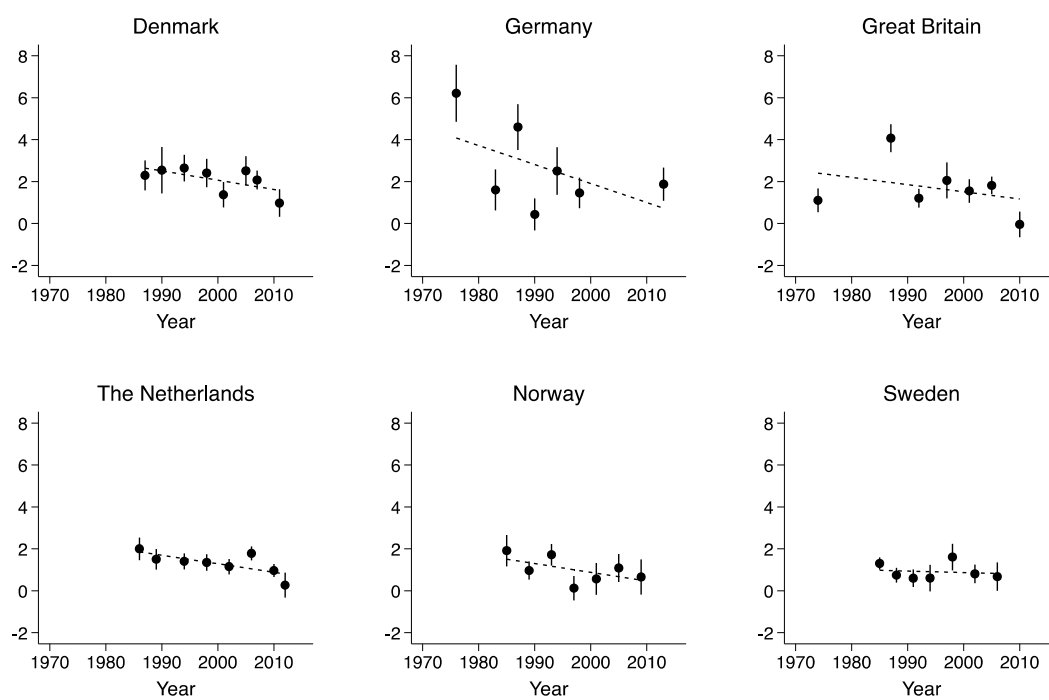
Source: 1985-1997: The True European Voter Dataset; 2001, 2005 and 2009: Norwegian National Election Studies (Statistics Norway). Standard errors in parentheses \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

TABLE 6. Voting for the incumbent in Sweden (1985-2006)

	1985	1988	1991	1994	1998	2002	2006
	b	b	b	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Female	0.273*	0.089	0.004	0.148	-0.224	-0.215	-0.144
	(0.121)	(0.124)	(0.126)	(0.152)	(0.199)	(0.179)	(0.219)
Age	-0.005	-0.001	0.005	0.002	0.022***	0.055 <sup>a</sup>	0.132 <sup>a</sup>
	(0.004)	(0.004)	(0.004)	(0.005)	(0.007)	(0.032)	(0.074)
Education (0-1)	-1.361***	-1.360***	-0.821***	0.742***	-0.228	-0.645*	-0.765*
	(0.168)	(0.161)	(0.189)	(0.214)	(0.289)	(0.299)	(0.362)
Religious attendance (0-1)	0.335	0.628**	0.476*	-1.196***	-0.130	-0.942*	-0.486
	(0.201)	(0.200)	(0.209)	(0.256)	(0.435)	(0.415)	(0.494)
Social class (0-1)	-1.234***	-1.540***	-2.017***	2.357***	-2.512***	-1.074**	-1.961***
	(0.233)	(0.244)	(0.276)	(0.269)	(0.471)	(0.327)	(0.474)
Urbanization (0-1)	0.298	0.490*	0.603**	-0.730**	0.296	0.292	-0.343
	(0.199)	(0.200)	(0.204)	(0.249)	(0.329)	(0.242)	(0.347)
Left right (0-1)	-6.434***	-5.633***	-6.922***	11.020***	-4.179***	-4.524***	-5.246***
	(0.363)	(0.355)	(0.399)	(0.585)	(0.510)	(0.482)	(0.567)
<b>Economy (0-1)</b>	<b>1.301***</b>	<b>0.743***</b>	<b>0.597**</b>	<b>0.603</b>	<b>1.607***</b>	<b>0.804***</b>	<b>0.671</b>
	<b>(0.150)</b>	<b>(0.180)</b>	<b>(0.216)</b>	<b>(0.324)</b>	<b>(0.324)</b>	<b>(0.228)</b>	<b>(0.347)</b>
Constant	2.855***	2.241***	2.815***	-6.119***	-0.088	1.706***	2.296***
	(0.362)	(0.383)	(0.382)	(0.453)	(0.640)	(0.423)	(0.544)
<i>N</i>	2,102	1,861	1,902	1,819	686	759	588
pseudo <i>R</i> <sup>2</sup>	0.369	0.301	0.341	0.512	0.265	0.212	0.298
Correctly classified	80.97%	76.89%	79.60%	85.98%	76.97%	73.12%	77.55%
Area under the ROC curve	0.884	0.851	0.876	0.934	0.834	0.805	0.852

Source: 1985-1998: The European Voter Dataset; 2002, 2006: Swedish National Election Studies. Standard errors in parentheses \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . <sup>a</sup> Age measured in age categories.

## APPENDIX 5. Summary of individual-level analyses – Economy coefficient



*Note:* Economic voting coefficient (and 95%-confidence interval) on voting for an incumbent party. Estimates from election-specific models (see Appendix 3)

# APPENDIX 6. Controlling for clarity of responsibility (interactions)

## Explaining the incumbent vote share in Western Europe (since 1950)

	Model 1	Model 2
	b	b
	(s.e.)	(s.e.)
Incumbent vote share <sub>e-1</sub>	0.841*** (0.044)	0.841*** (0.044)
GDP growth rate	1.010 (0.519)	0.877 (0.521)
Time	-0.127*** (0.023)	-0.154*** (0.034)
GDP growth x Time		0.008 (0.008)
ENEP <sub>e-1</sub>	1.577* (0.611)	1.729** (0.637)
GDP growth x ENEP <sub>e-1</sub>	-0.155 (0.149)	-0.191 (0.154)
# parties in government	0.481 (0.633)	0.489 (0.636)
GDP growth x # parties in government	0.049 (0.158)	0.059 (0.158)
Constant	4.353 (3.362)	4.869 (3.355)
Country dummies?	Yes	Yes
N elections	240	240
N countries	14	14
R <sup>2</sup>	0.885	0.885

Note: OLS regression with panel corrected standard errors (PCSE), estimated through xtpcse in Stata. Significance levels: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. e-1 refers to the previous election.



APPENDIX 7. Aggregate-level analysis of the impact of GDP on incumbents' vote share  
(only elections included in individual-level analysis)

Explaining the incumbent vote share in Western Europe (only elections included in individual-level analysis)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	b	b	b	b	b	b
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Incumbent vote share <sub>e-1</sub>					0.541*** (0.139)	0.550*** (0.139)
GDP growth rate	-0.339 (0.562)	-1.894 (2.137)	0.422 (0.407)	0.221 (1.163)	0.401 (0.355)	1.201 (1.250)
Time	-0.364** (0.116)	-0.434** (0.166)	-0.219* (0.093)	-0.228 (0.131)	-0.193** (0.073)	-0.155 (0.097)
GDP growth x Time		0.036 (0.046)		0.005 (0.038)		-0.018 (0.030)
Constant	58.959*** (6.074)	62.107*** (8.200)	47.402*** (4.955)	47.834*** (6.522)	24.036*** (6.345)	21.890** (6.975)
Country dummies?	No	No	Yes	Yes	Yes	Yes
N elections	46	46	46	46	46	46
N countries	6	6	6	6	6	6
R <sup>2</sup>	0.179	0.188	0.551	0.551	0.700	0.702

Note: OLS regression with panel corrected standard errors (PCSE), estimated through xtpcse in Stata.  
Significance levels: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. e-1 refers to the previous election.